

5.2.10. Insquare W 321 AC/DC

Primary:

Power supply: 3 x 400 V
Frequency: 50 / 60 Hz
cos phi: 0.95

TIG DC- and AC-operation:

Open circuit voltage: 80 V
Welding voltage: 10 - 22.8 V
Welding current: 5 - 320 A
Duty cycle 60 % (10 min.): 320 A (40 °C)
Duty cycle 80 % (10 min.): 300 A (40 °C)
Duty cycle 100 %: 260 A (40 °C)
Prim. cont. power: 13.2 kVA
Prim. cont. current: 19 A
Prim. max. current: 22 A



Protection class:	IP 23	Pulsation slow:	10 ms - 2.5 s
Insulation class:	H	Pulsation fast:	50 Hz - 5 kHz
Cooling:	AF	Hotstart time:	0 - 1.5 s
Main switch:	3-phase	Hotstart current:	10 - 200 %
Welding modes:	TIG DC (-), TIG DC (+), TIG DC (-) w. start puls (+), TIG AC "square arc", TIG AC "balanced TIG", MMA/stick electrode (-), MMA/stick electrode (+), MMA/stick electrode sinusoidal, MMA/stick electrode square arc	Arc force:	100 - 250 %
Selector 1:	current 1, time 1, upslope and downslope time, start current, final current, ignition impulse, spot w. time, gas pre- and post-flow time	Button:	test protection device program selection
Selector 2:	current 2, time 2 (for pulsation), AC balance, AC frequency, hotstart time a. current, arc force, stick electrode diameter, display voltage	Button:	mains ON, temperature protection failure, protection device, hold function, start current, up slope, down slope, current 1 + 2, final curr. inverter
Adjusting:	2 rotary switches for selectors 1 and 2	LEDs:	mains ON, temperature protection failure, protection device, hold function, start current, up slope, down slope, current 1 + 2, final curr. inverter
Digital displays:	2 LED displays with pre-indication and hold function for current, voltage, time, frequency	Power source:	inverter
Timer functions:	OFF, quick and slow pulsation, spot welding time	Norm:	EN 60974-1 "S" / CE
Ignition:	OFF, high frequency, LiftTIG	Torch connection:	Euro connector with 5-pole plug
Energy control:	at the machine, at the remote controls, at the torch	Torch cooling:	integrated water cooling system
Operation modes:	2-stroke, 4-stroke, 4-stroke with 2 currents, gas check, test, programming	Socket 50 mm ² :	earth lead
Program storage:	20 programs	Socket 50 mm ² :	electrode welding cable
AC frequency:	50 - 200 Hz	Mains supply cable:	4 x 4 mm ² , 5 m long with plug 3 x 400 V, 32 A
AC balance:	9 - 91 %	Gas hose:	2 m
Gas pre-flow time:	0 - 3 s	Gas bottle holder:	10 - 20 - 50 l cylinders
Gas post-flow time:	0 - 25 s	Lifting eyes:	4 pieces (option)
Up slope time:	0 - 2 s	Weight:	140 kg
Down slope time:	0 - 20 s	Dimensions l x w x h:	1020 x 476 x 970 mm incl. gas bottle holder
Ignition impulse:	0 - 100 ms		
Spot welding time:	0.1 - 2.5 s		
		MMA/stick electrode operation:	
		Stick electrodes:	1.5 - 6 mm (Cel-suitable)
		Open circuit voltage:	80 V
		Welding voltage:	20 - 32.8 V
		Welding current:	5 - 320 A
		Duty cycle 60 % (10 min.):	320 A (40 °C)
		Duty cycle 80 % (10 min.):	300 A (40 °C)
		Duty cycle 100 %:	260 A (40 °C)
		Prim. cont. power:	14.5 kVA
		Prim. cont. current:	21 A
		Prim. max. current:	27 A